

IN THE CLAIMS:

Claims 1-11 (Cancelled)

Claim 12 (Original) Apparatus for providing augmentation data for transmission by a satellite, comprising:

means for receiving the augmentation data;

means for providing position data relating to the position of the satellite;

determining means for determining whether the position data satisfies a predetermined criterion; and

means for selectively enabling output of said augmentation data for transmission to said satellite in response to the determining means.

Claim 13 (Original) A method of providing augmentation data for transmission by a satellite, comprising:

providing position data relating to the position of the satellite;

determining whether the position data satisfies a predetermined criterion; and

selectively enabling output of said augmentation data for transmission to a satellite in response to the result of said determining step.

Claim 14 (Original) Satellite radiodetermination apparatus, comprising:

means for receiving a plurality of ranging signals from a corresponding plurality of satellites;
and

means for receiving ionospheric delay data, the apparatus being arranged to perform radiodetermination on the basis of said plurality of ranging signals and selectively on the basis of said ionospheric delay data in response to authorization data provided at said apparatus.

Claim 15 (Original) Apparatus as claimed in claim 14, further including means for receiving differential correction data which is substantially independent of ionospheric delay, wherein said apparatus is arranged to perform radiodetermination additionally on the basis of said differential correction data.

Claim 16 (Currently Amended) Apparatus as claimed in claim 14 ~~or claim 15~~, wherein said ionospheric delay data is encrypted, and said apparatus includes decryption means for decrypting said ionospheric delay data in response to said authorization data.

Claim 17 (Currently Amended) Apparatus as claimed in ~~any one of claims 14 to 16~~ claim 14, including input means for inputting said authorization data.

Claim 18 (Original) Apparatus for providing augmentation data for transmission via a satellite, comprising:

means for receiving said augmentation data which includes unencrypted ionospheric delay data and unencrypted differential correction data which is substantially independent of ionospheric delay;

means for encrypting said ionospheric delay data; and

means for outputting said encrypted ionospheric delay data and said unencrypted differential correction data for transmission via said satellite.

Claim 19 (Original) A method for providing ionospheric delay data and differential correction data which is substantially independent of ionospheric delay for transmission via a satellite, comprising:

receiving said ionospheric delay data and said differential correction data in an unencrypted form;

encrypting said ionospheric delay data; and
outputting said encrypted ionospheric delay data and said unencrypted differential correction data for transmission via said satellite.

Claim 20 (Original) Satellite radiodetermination apparatus, comprising:
means for receiving a plurality of ranging signals from a corresponding plurality of satellites;
means for receiving ionospheric delay data; and
means for receiving residual error data relating to residual errors in said ionospheric delay data, said satellite radiodetermination apparatus being arranged to perform radiodetermination on the basis of said plurality of ranging signals, said ionospheric delay data and said residual error data.

Claim 21 (Original) Apparatus as claimed in claim 20, wherein said residual error information includes error bound information relating to the error bounds of said ionospheric delay information.

Claim ~~22~~ 25 (Currently Amended) Apparatus for determining residual errors in a satellite radiodetermination system, comprising:

means for receiving a plurality of ranging signals from a plurality of satellites;
means for receiving ionospheric delay data and differential correction data relating to errors in said ranging signals which are independent of ionospheric delay;

calculating means for calculating a position or time on the basis of said ranging signals corrected on the basis of said differential correction data and said ionospheric delay data; and

error calculating means for calculating errors in said ionospheric delay data on the basis of the difference between said calculated position or time and a predetermined reference position or time.

Claim 23 (Original) Apparatus as claim in claim 22, wherein said means for receiving said ranging signals comprises a dispersed plurality of receiving stations, said calculating means being arranged to calculate a plurality of positions corresponding respectively to said receiving stations, and said error calculating means being arranged to calculate said errors on the basis of the respective differences between said calculated positions and predetermined positions corresponding to said receiving stations.

Claims 24 (Canceled)

Claim 25 (Currently Amended) A terrestrial station including apparatus as claimed in ~~any one of claims 12, 18, 22 or 23~~ claim 12.

Claims 26-27 (Canceled)

Claim 28 (New) An apparatus according to claim 18, wherein the apparatus is a terrestrial station.

Claim 29 (New) An apparatus according to claim 22, wherein the apparatus is a terrestrial station.

Claim 30 (New) An apparatus according to claim 23, wherein the apparatus is a terrestrial station.